

Minnesota Agro-Forestry Cooperative: A Minnesota hybrid poplar success story

D. Schmidt^a, A. Shogren^{*a}, and M. Downing^b

^aWesMin RC&D, 900 Robert Street Suite 104, Alexandria, MN USA 56308

Fax: 320-762-5502; dean.schmidt@mn.usda.gov

^bOak Ridge National Laboratory, PO Box 2008, Oak Ridge, TN USA 37831

Introduction to MAFC

Minnesota has an important history in working with hybrid poplar. In 1991, WesMin Resource Conservation and Development (RC&D) first began discussions with the MN Department of Natural Resources, Energy Performance Systems, Inc. and others interested in growing trees on croplands. In 1993, WesMin RC&D and partners worked with the Department of Energy Biofuels Feedstock Development Program to create the Minnesota Wood Energy Scale-up Project. The project is the first biomass to electrical energy research project involving hybrid poplars.

In March of 1995 WesMin RC&D and partners began discussions with landowners about forming a cooperative to grow, collectively market, and harvest hybrid poplars. The Minnesota Agro-Forestry Cooperative (MAFC) was organized in the mid 1990's by a group of farmers who were producing hybrid poplar trees on their land. The MAFC was incorporated in January of 1996 as a cooperative under Chapter 308A. The cooperative currently has 36 members with a board of directors comprised of 7 elected members. The demand for an agro-forestry cooperative is evident in Minnesota because of many factors. This group of citizens has led the way in lobbying the Minnesota State Legislature for funding for agro-forestry programs.

Importance of Hybrid Poplar for Minnesota

The aspen supply for the pulp and paper mills faces a shortage of harvestable aspen timber within the next 8-10 years. Hybrid poplar is used in the mills as an aspen replacement. Growing hybrid poplar in fields means easy access for harvesting equipment and year round access to a wood and fiber source. The prices for aspen have been steadily rising (approximately 7% per year) in Minnesota and the local farmer can grow hybrid poplar as an alternative agriculture product. There seems to be unique economic opportunity on the horizon with this predicted shortage of aspen and the higher prices received at recent aspen sales.

The state has also set in place mandates for renewable energy (such as burning biomass fuels). These mandates came from an agreement between the Minnesota State Legislature and Excel Energy regarding the storage of nuclear waste at the Prairie Island facility. The Minnesota Department of Commerce has recently expressed concerns (Keeping the Lights On meetings) about a predicted energy shortage. Minnesotan's will need to have energy in the future of renewable energy from Whole Tree Energy (WTE) or hybrid poplar burning that may meet that need.

Feasibility Study and Business Planning

In 1996 a feasibility study was prepared for the MAFC by Cooperative Development Services. The recommendations from the study concluded that there are no major barriers identified from establishing a hybrid poplar business. There is quality land available to plant hybrid poplar, interest from landowners is growing, and there is a favorable financial outlook for the Cooperative. The potential problems include the distance to mills, unwillingness of buyers to contribute to long term contracts, and the financial gap between planting and harvesting. One obstacle is a lack of regular yearly payments and income to pay expenses while waiting for 10-12 years for the perennial crop to be harvested. It was recommended that a business plan then be developed; and in June of 1999 it was completed.

Producer Capitalization Program, 1999

The MAFC hired independent consultants to put together a *Producer Capitalization Program* (PCP) that would provide regular yearly payments. These payments would actually be advanced payments on the future crop to hybrid poplar growers for the establishment and maintenance of the plantations, and to provide regular yearly income to offset cost and expenses. The PCP program will act like a revolving loan program (similar to the regular payments of the Conservation Reserve Program) and requires \$10 million for start up to assist landowners with cost share through the growing of their plantation. When the trees are sold, the MAFC will receive payment for the timber and forward the payment to the individual grower, minus any advanced funds and other charges. The MAFC may also collect a 5% fee to retain for administration charges and to grow the Cooperative.

Minnesota State Legislature Funding, 2000

In order to get the PCP in place the Cooperative requested a grant of \$10,000,000 for the year 2000 from the Minnesota State Legislature to start the PCP. Their efforts were rewarded with both a state grant and a loan program. A \$200,000 loan program is housed in the Minnesota Department of Agriculture Rural Finance Authority (MDA RFA) with the State of Minnesota. These funds are to begin the PCP. A \$200,000 grant program is also being administered by the MDA RFA. The state grant program will be used to develop the hybrid poplar program in Minnesota. These funds were secured in a bonding year in Minnesota when it was extremely hard to receive any new funding due to budget cuts.

St. Peter CRP Biomass Pilot Project Proposal, 2000

The MAFC and EPS/Beck Power Company have combined forces to submit a CRP Pilot Project Proposal for Minnesota. The United States Department of Agriculture (USDA) allows for six pilot projects in six states of up to 50,000 acres of Conservation Reserve Program (CRP) per state (totaling not more than 250,000 acres) to be harvested for biomass production. The proposal was submitted in December of 2000 and was approved by the Farm Services Agency at the state level and is now in Washington, D.C awaiting approval there. This project would allow for the production of 46,000 acres of harvestable CRP land in South Central Minnesota, the MAFC plans to work with the landowners to negotiate contracts with the power company, assist with planting, maintenance, harvesting, transportation, etc. The proposal is unique and supported by RC&D's because it provides a means for "productive conservation," or a way to reduce erosion and improve water quality while still producing a harvestable crop. The WTE plant and alternative agriculture benefits would be very important to Minnesota's economy.

The Future

The MAFC continues to provide public information to all interested persons and plans to be able to assist with harvesting, collective bargaining and marketing, and selling the timber. Equipment, only used once in 10-12 years, could be rented out by the MAFC to Cooperative members. The MAFC has become an effective citizen lobbyist group and the future of hybrid poplar programs in Minnesota is very promising due to the legislative efforts of MAFC. The MAFC currently holds board meetings monthly and they are aggressively working on many aspects and locations for hybrid poplar projects to begin. WesMin RC&D, MN DNR, and the DOE Biofuels Feedstock Development Program continue to assist the MAFC with technical assistance, grant writing, research, and program development.